

Environmental Assessment for the Conservation of Native Westslope Cutthroat Trout in Camas Lake and Big Camas Creek by Mechanical Removal of Nonnative Yellowstone Cutthroat Trout

Draft Environmental Assessment



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Montana Fish, Wildlife & Parks

Region 4 Office

4600 Giant Springs Rd

Great Falls, MT 59405



**MONTANA FISH,
WILDLIFE & PARKS**

Executive Summary

Westslope cutthroat trout (WCT) have undergone substantial reductions in distribution and abundance throughout their native range in the upper Missouri River basin. Genetically unaltered WCT presently occupy 2.3% of their historic habitat within the Smith River watershed. WCT in the Smith River watershed face multiple threats including reduced distribution and abundance, stream and riparian habitat conditions, and spatial isolation; however, the single most significant threat to the long-term persistence of WCT is the presence of non-native trout. Since the late 1800's, numerous nonnative fish species have been introduced throughout the Smith River watershed, and nonnative brook, brown, rainbow, Yellowstone cutthroat, and hybrid trout have become the dominant species in most streams historically occupied by WCT. Brook and brown trout displace WCT through competition or predation. Rainbow and Yellowstone cutthroat trout readily hybridize with WCT, resulting in populations entirely comprised of hybrid individuals (hybrid swarm) or mixed populations of hybrid and genetically unaltered fish. Currently, the most substantial remaining WCT populations are those isolated from nonnative species by natural or constructed barriers. Existing populations not protected by barriers have reduced distribution and densities or are irreversibly hybridized. The likelihood of long-term persistence of WCT populations not protected by barriers is low.

Camas Lake and upper Big Camas Creek were likely historically fishless above a series of natural waterfall barriers located upstream of the confluence of Little Camas Creek. Yellowstone cutthroat trout (YCT) were stocked in Camas Lake by FWP in 1938 and 1940 and subsequently established a self-sustaining population within the lake and the upper 4 miles of Big Camas Creek. Extensive surveys of the Big Camas Creek drainage were conducted in the early 2000's. Genetic monitoring confirmed that the fish in Camas Lake and upper Big Camas Creek were nonnative YCT. Below the barrier falls near the confluence with Little Camas Creek, Big Camas Creek contains hybridized WCT and nonnative brook trout. Because of the presence of isolating barrier waterfalls, Camas Lake and Big Camas Creek are considered a high priority WCT restoration area. Camas Lake and Big Camas Creek were chemically treated with the piscicide rotenone to remove nonnative Yellowstone cutthroat trout in 2014. WCT restoration began in 2015 following the previous year's piscicide treatment. However, a small number of YCT were found to have persisted in the Camas Lake/Big Camas Creek system.

Removal of nonnative Yellowstone cutthroat trout from Camas Lake and upper Big Camas Creek would benefit the WCT population by reducing the threat of hybridization. The proposed project seeks to mechanically remove YCT by trap net and backpack electrofishing Big Camas Creek above Camas Lake for an estimated two-week period during the spring spawning season. This mechanical suppression effort will reduce the threat of competition and reduce the number of YCT that can hybridize with the native WCT. The proposed timeline for the action of this mechanical removal project would be 2022-2025. Subsequent years would include continued supplemental stocking of WCT. Ultimately the long-term goal of this project is to maintain a WCT conservation population with a >90% WCT genetic contribution. It is anticipated that the proposed suppression effort will decrease the time it takes the population to reach <10% introgression.

Environmental Assessments (EA) are a requirement of the Montana Environmental Policy Act (MEPA) which require state agencies to consider the environmental, social, cultural, and economic effects of proposed actions. This EA considers potential consequences of three alternatives to conserve fish in Camas Lake and Big Camas Creek.

1. Alternative 1 (Preferred): Mechanical removal of nonnative Yellowstone cutthroat trout from 0.75 miles of Big Camas Creek.
2. Alternative 2: No action.

3. Alternative 3: Removal of nonnative Yellowstone cutthroat trout from Big Camas Creek with rotenone.

Alternative 1 is the preferred alternative. It would have short-term, minor effects on wildlife, recreation, and vegetation. This alternative would be beneficial to WCT and would be a substantial contribution to the long-term conservation of the species in the Smith River watershed.

MEPA requires public involvement and opportunity for the public to comment on projects undertaken by the act's agencies. A 30-day public comment period will extend from February 14th to March 16th, 2022. Interested parties should send comments to:

Montana Fish, Wildlife & Parks – Region 4
c/o Big Camas Creek Westslope Cutthroat Trout Conservation
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List of Abbreviations

ARM	Administrative Rules of Montana
DEQ	Montana Department of Environmental Quality
EA	Environmental Assessment
FWP	Montana Fish, Wildlife & Parks
GMU	Geographic management unit
MCA	Montana Code Annotated
MCTSC	Montana Cutthroat Trout Steering Committee
MEPA	Montana Environmental Policy Act
MNHP	Montana Natural Heritage Program
MS-222	Tricaine mesylate
NEPA	National Environmental Policy Act
MOU	Memorandum of Understanding
USEPA	United States Environmental Protection Agency
USFS	United States Forest Service
WCT	Westslope Cutthroat Trout
YCT	Yellowstone Cutthroat Trout

1 PROPOSED ACTION and BACKGROUND

1.1 *Type of Proposed Action*

Conservation Action for Westslope Cutthroat Trout (WCT)

1.2 *Agency Authority for the Proposed Action*

Montana state law provides Montana Fish, Wildlife & Parks (FWP) with the authority for implementation of fish management and restoration projects (MCA § 87-1-702; § 87-1-201[9][a]). In addition, Montana state law authorizes FWP to manage wildlife, fish, game and nongame animals to prevent the need for listing under the Endangered Species Act (ESA), and listed, sensitive, or species that are candidates for listing under the ESA must be managed in manner that assists in the maintenance or recovery of the species (MCA§ 87-5-107). In waters where FWP is seeking to remove or control unauthorized species, FWP must endeavor to protect the previously existing fishery and suppress or eradicate the unauthorized species to maintain the existing management objectives for that fishery (ARM 12. 7. 1501[4]). Montana state law also allows the use of chemicals to remove fish (ARM 12. 7. 1503[1][f][ii]).

Planning documents and strategies developed by agencies and collaborating entities also provide official justification for the proposed project (Table 1). These include conservation agreements among stakeholder groups, state and federal laws, and agency plans designed to conserve, secure and protect WCT within the Smith River Sub-basin (i.e., restore WCT to 20% of historic range).

Table 1. Planning and strategy documents with relevance to conservation of WCT in Big Camas Creek

<i>Agency</i>	<i>Citation</i>	<i>Website</i>
Montana Cutthroat Trout Steering Committee (MCTSC)	Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout in Montana (2007)	https://myfwp.mt.gov/getRepositoryFile?objectID==28662
FWP	Status and Conservation Needs for Westslope Cutthroat Trout in Northcentral Montana (2011)	Internal document
FWP	Statewide Fisheries Management Plan (2019)	http://fwp.mt.gov/fishAndWildlife/management/fisheries/statewidePlan/
FWP	Wild Fish Transfer Policy (1996)	https://myfwp.mt.gov/getRepositoryFile?objectID=30569

1.3 *Estimated Commencement Date*

The estimated commencement date is June 2022.

1.4 *Name and Location of the Project*

Conservation of Native Westslope Cutthroat Trout in Camas Lake and Big Camas Creek by Mechanical Removal of Nonnative Yellowstone Cutthroat Trout.

Camas Lake and Big Camas Creek are in the Smith River watershed. The project is in Meagher County, approximately 18 miles west of White Sulphur Springs, Montana (Figure 1). The legal description is T9N, R3E, sections 11 and 12.

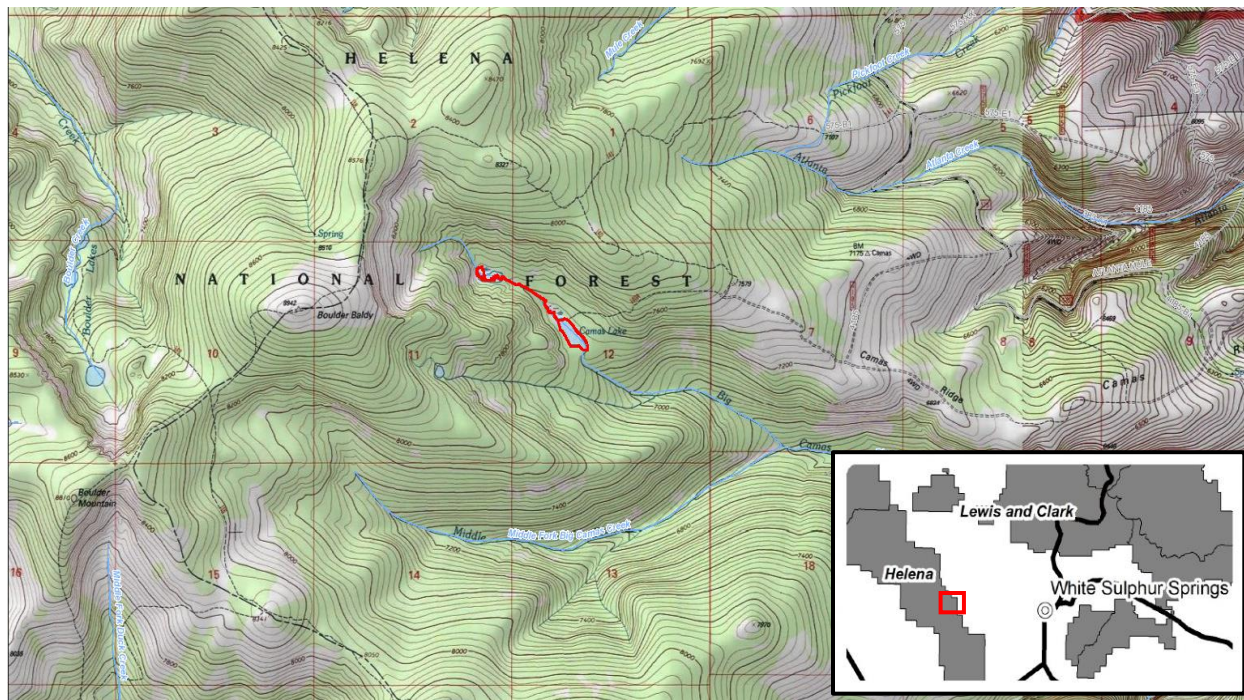


Figure 1. Map of Camas Lake and Big Camas Creek. The stream segments delineated in red indicate the spatial extent of the project area.

1.5 *Project Size (Affected Area)*

1. Developed/residential	0 acres
2. Industrial	0 acres
3. Open space/woodlands/recreation	0 acres
4. Wetlands/riparian	0.75 miles
5. Floodplain	0 acres
6. Irrigated cropland	0 acres
7. Dry cropland	0 acres
8. Forestry	0 acres
9. Rangeland	0 acres

The project area includes 0.75 miles of Big Camas Creek extending from the inlet of Camas Lake to a high gradient cascade that restricts upstream fish movement located at 46.55938, -111.30814.

1.6 *Narrative Summary of the Proposed Action and the Purpose of the Proposed Action*

1.6.1 *Summary and Background*

Westslope cutthroat trout (WCT) *Oncorhynchus clarkii lewisi*, historically the most widely distributed subspecies of cutthroat trout, have undergone reductions in distribution and abundance throughout their native range (Behnke 2002; Shepard et al. 2005; Heckel et al. 2020). The upper Missouri River drainage

in Montana in particular has experienced marked reductions, with nonhybridized WCT occupying less than 5% of their historical range (Shepard et al. 1997; Shepard et al. 2003). Nonnative species introductions, habitat degradation and fragmentation, and overexploitation have been identified as factors leading to population declines (Shepard et al. 2005; Muhlfeld et al. 2016; Heckel et al. 2020). However, human-induced hybridization with nonnative trout has been especially detrimental causing widespread genomic extinction of WCT populations (Allendorf and Leary 1988; Muhlfeld et al. 2014). The declining status of WCT has led to its designation as a Species of Special Concern by the State of Montana, a Sensitive Species by the U.S. Forest Service (USFS), and a Special Status Species by the U.S. Bureau of Land Management (BLM). In addition, in 1997 a petition was submitted to the U.S. Fish and Wildlife Service (USFWS) to list WCT as “threatened” under the ESA. A 2003 USFWS status reviews found that WCT are “not warranted” for ESA listing; however, this finding was in litigation until 2008 and additional efforts to list WCT under ESA are possible in the future.

Completion of the proposed project would increase the amount of protected WCT habitat in the Smith River sub-basin by 19% (from 21.1 miles to 25.1 miles). Objective 3 of the *Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout and Yellowstone Cutthroat Trout in Montana* is “Seek collaborative opportunities to restore and/or expand each cutthroat trout subspecies into selected suitable habitats within their respective historic ranges.” (FWP 2007). The *Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout and Yellowstone Cutthroat Trout in Montana* was cooperatively developed and signed by American Wildlands, Blackfeet Tribe, Crow Tribe, Confederated Salish and Kootenai Tribes, Federation of Fly-Fishers, Glacier National Park, Greater Yellowstone Coalition, Montana Chapter of the American Fisheries Society, Montana Department of Natural Resources & Conservation, Montana Farm Bureau, Montana Fish, Wildlife & Parks, Montana Stockgrowers Association, Montana Trout Unlimited, Montana Wildlife Federation, Natural Resource Conservation Service, private landowners, the Bureau of Land Management, the U.S. Fish & Wildlife Service, the U.S. Forest Service, and Yellowstone National Park (FWP 2007).

Camas Lake and upper Big Camas Creek were likely historically fishless above a series of natural waterfall barriers located upstream of the confluence of Little Camas Creek. Yellowstone cutthroat trout were stocked in Camas Lake by FWP in 1938 and 1940 (26,700 fish) and subsequently established a self-sustaining population within the lake and the upper 4 miles of Big Camas Creek. Extensive surveys of the Big Camas Creek drainage were conducted in the early 2000’s. Genetic monitoring confirmed that the fish in Camas Lake and upper Big Camas Creek were nonnative YCT. Below the barrier falls near the confluence with Little Camas Creek, Big Camas Creek contains hybridized WCT and nonnative brook trout. Because of the presence of isolating barrier waterfalls, Camas Lake and Big Camas Creek are considered a high priority WCT restoration area.

In 2013, an Environmental Assessment (EA) was released for public comment on a WCT restoration project in Camas Lake and Big Camas Creek using rotenone to remove nonnative YCT. Public comment was received from both private citizens and the Meagher County Board of Commissioners. The County Commissioners recommended a public meeting be held because of public interest and questions related to the project. The discussion covered ESA implications, assurances that the proposed transfer would work, the safety of the proposed EPA registered piscicide, concerns related to fishing opportunities, reasoning behind selecting Camas Lake and Big Camas Creek as a restoration site, fitness of WCT, history of the YCT population in Camas Lake, the Candidate Conservation Agreement with Assurances, communication issues between the USFS and FWP and local ranchers, and potential impacts to downstream populations of brook trout and hybridized WCT. The meeting was very helpful in clarifying for the public the reasoning behind the project and the consensus at the end of the meeting was overall positive in nature. A decision notice was issued in 2014 and the proposed project was approved.

In 2014, Camas Lake and 4 miles of Big Camas Creek were chemically treated with rotenone to remove YCT. Approximately 3,600 WCT embryos from Lone Willow Creek (Smith River sub-basin) were planted in remote site incubators (RSI) in Big Camas Creek in 2015 following the previous year's treatment. Additionally, triploid WCT (sterile) were planted in Camas Lake from 2014-2017 (4,000 total) to establish a recreational fishery while the wild fish population expanded.

During the 2015 RSI installation in Big Camas Creek, YCT were detected above Camas Lake indicating an incomplete chemical treatment in 2014. Backpack electrofishing of the inlet stream was initiated and YCT as well as wild WCT derived from the RSIs were removed to reduce the likelihood of future hybridization. Gill netting was implemented in the summer of 2016 and angling was used 2016-2018 as additional removal methods. The installation of modified fyke net in the Camas Lake inlet was used from 2017-2020 in conjunction with electrofishing to remove YCT entering the stream during the spring spawning season.

WCT have become established in Camas Lake and upper Big Camas Creek. However, YCT continue to persist at low levels within the drainage, posing a hybridization threat to the WCT population. In the most recent sampling event, YCT comprised 4% of the total catch in Camas Lake and 6% of the catch in upper Big Camas Creek (Poole 2021). Presently, the WCT population is largely derived of triploid (sterile) individuals from the post treatment stocking efforts and a smaller contingent of wild fish from the 2015 RSI installation. Stocking of diploid (reproductively viable) WCT will resume in 2022. Removal of YCT would help ensure the long-term management goals of maintaining a WCT conservation population with a >90% WCT genetic contribution. This EA describes a proposed action moving forward to complete the prior 2014 commitment of establishing a WCT population in the Big Camas Creek drainage.

1.6.2 Proposed Action

This proposed action would involve removing nonnative YCT from 0.75 miles of Big Camas Creek above Camas Lake using trap nets and backpack electrofishing for approximately a two-week period during the spring spawning season. Duration of the spring mechanical removal efforts will depend upon environmental conditions and staff availability. The peak of the spring spawning season in Big Camas Creek typically occurs during the last week of June and the first week of July.

This mechanical suppression effort will reduce the number of YCT in Camas Lake and Big Camas Creek and subsequently will reduce the threat of competition and reduce the number of YCT that can hybridize with the native WCT. The proposed timeline for the action of this mechanical removal project would be 2022-2025. This mechanical suppression effort will remove YCT; however, because of limitations associated with mechanical removal methods in this system it is anticipated that not all YCT will be removed from Camas Lake and upper Big Camas Creek. Therefore, following the mechanical suppression, continued supplemental stocking of diploid WCT will occur. Stocking diploid WCT will allow introgression with the remaining YCT. Ultimately the long-term goal of this project is to establish a WCT conservation population with a >90% WCT genetic contribution. It is anticipated that the proposed suppression effort will decrease the time it takes the population to reach <10% introgression by reducing the number of YCT present as WCT become established and reproductively active. However, it should be noted that it will take a considerable number of years to reach the long-term genetic goals (estimated no less than 18-36 years) based on previous genetic swamping efforts in Montana.

1.6.3 Method of Fish Removal

Fish will be collected by trap net and backpack electrofishing. A modified fyke net would be installed in Big Camas Creek directly upstream of the Camas Lake inlet to capture the upstream migrating YCT and WCT (Figure 2). Captured YCT would be removed and WCT would be passed upstream to continue their spawning migration. A 0.75-mile reach of Big Camas Creek would be backpack electrofished to capture any YCT that bypass the trap net. Smith-Root model LR-20B or LR24 backpack electrofishers will be used. All incidentally captured WCT will be released.



Figure 2. Modified fyke net with extended wing walls designed to capture upstream migrating cutthroat trout.

1.6.4 Project Area

The project area encompasses a 0.75-mile reach of Big Camas Creek beginning at the inlet of Camas Lake and extending to a high gradient cascade which limits the upstream distribution of fish within the drainage (Figure 3).

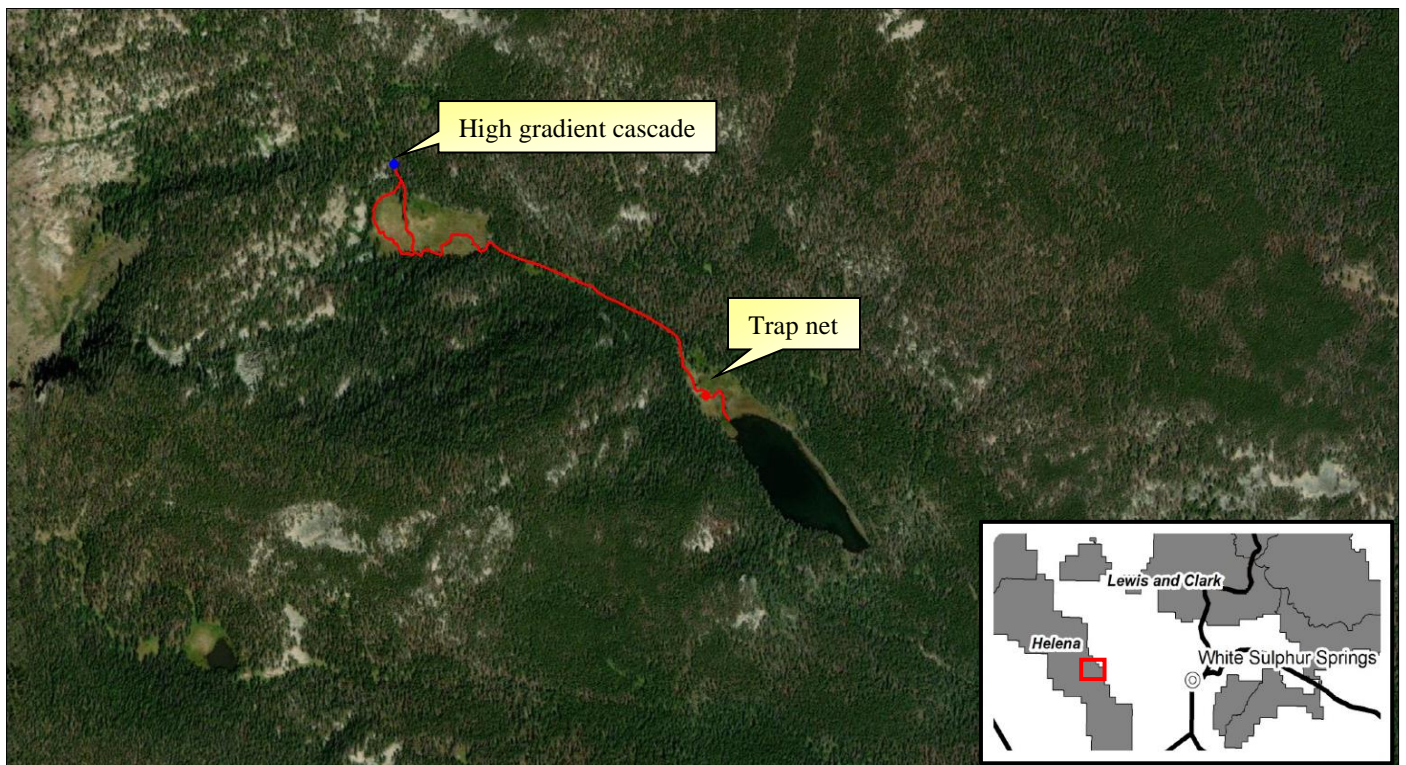


Figure 3. Project area details in upper Big Camas Creek. Stream segments delineated in red would be backpack electrofished to remove YCT.

1.6.5 Fate of Dead Fish

YCT collected by trap net and backpack electrofishing would be euthanized in an overdose of MS-222. Dead fish would have their swim bladders punctured and would be sunk in deep-water portions of Camas Lake for nutrient recycling.

1.6.6 Duration of Project

This proposed action would occur for an approximate two-week period during the spring spawning season on an annual basis from 2022-2025. The peak of the spring spawning season in Big Camas Creek typically occurs during the last week of June and the first week of July. However, based on discharge and temperature, the removal period may be adjusted to coincide with peak YCT spawning movements.

1.6.7 Monitoring

The effectiveness of the proposed project would be determined through continued genetic monitoring of the WCT population in Camas Lake and upper Big Camas Creek. Subsequent years following the project would include continued supplemental stocking of diploid WCT. Ultimately the long-term goal of this project is to establish a WCT conservation population with a >90% WCT genetic contribution. It is anticipated that the proposed removal effort will decrease the time it takes the population to reach <10% introgression. However, it should be noted that it may take a considerable number of years to reach the long-term genetic goals (estimated no less than 18-36 years) based on previous genetic swamping efforts in Montana.

2 Environmental Review

2.1 Physical Environment

2.1.1 Land Resources

1. LAND RESOURCES Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				
f. Other:						

2.1.2 Water

2. <u>WATER</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen, or turbidity?			X			2a
b. Changes in drainage patterns or the rate and amount of surface runoff?		X				
c. Alteration of the course or magnitude of flood water or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				
l. Will the project affect a designated floodplain?		X				
m. Will the project result in any discharge that will affect federal or state water quality regulations?		X				

Comment 2a

Installation and removal of the trap net in Big Camas Creek would likely cause a slight increase in turbidity. Any disturbance would be short-term and minor.

2.1.3 Air

3. <u>AIR</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Emission of air pollutants or deterioration of ambient air quality?		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				

d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				
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2.1.4 Vegetation

4. <u>VEGETATION</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grasses, crops, and aquatic plants)?		X				
b. Alteration of plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. Will the project affect wetlands, or prime and unique farmland?		X				

2.1.5 Fish/Wildlife

5. <u>FISH/WILDLIFE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?			X		Yes	5b
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?			X		Yes	5e
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				

h. Will the project be performed in any area in which T&E species are present, and will the project affect any T&E species or their habitat?		X				
i. Will the project introduce or export any species not presently or historically occurring in the receiving location?		X				

Comment 5b

This project is designed to remove nonnative YCT. The proposed action would benefit WCT by reducing competition and hybridization. The impact of fish removal would be short term and minor because YCT make up a small proportion of the fish population in Camas Lake and upper Big Camas Creek. All incidentally captured WCT would be released. WCT densities will be maintained through natural reproduction as well as supplemental stocking.

Comment 5e

This project would involve the temporary installation of a trap net in upper Big Camas Creek to trap cutthroat trout migrating upstream to spawn. All nonnative YCT trapped would be killed. Incidentally trapped WCT would be passed upstream of the trap net to continue their upstream spawning migration.

2.2 Human Environment

2.2.1 Noise/Electrical Effects

6. <u>NOISE/ELECTRICAL EFFECTS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Increase in existing noise levels?			X			6a
b. Exposure of people to severe or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?			X			6b
d. Interference with radio or television reception and operation?		X				

Comment 6a

The only noise generated from this project would occur during the installation of the trap net and would be short term and minor.

Comment 6b

This project involves backpack electrofishing to collect fish from Big Camas Creek. All electrofishing will be conducted in accordance with FWP electrofishing guidelines, using only trained electrofishing crew members. All equipment will be operated according to the approved electrofishing guidelines.

2.2.2 Land Use

7. <u>LAND USE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of or interference with the productivity or probability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

2.2.3 Risks/Health Hazards

8. <u>RISKS/HEALTH HAZARDS</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				
d. Will any chemical toxicants be used?		X				

2.2.4 Community Impact

9. <u>COMMUNITY IMPACT</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				

c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

2.2.5 Public Services/Taxes/Utilities

10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy resource?		X				
e. Define projected revenue sources		X				
f. Define projected maintenance costs		X				

2.2.6 Aesthetics/Recreation

11. <u>AESTHETICS/RECREATION</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?			X			11a
b. Alteration of the aesthetic character of a community or neighborhood?		X				

c. Alteration of the quality or quantity of recreational/tourism opportunities and setting?			X			11b
d. Will any designated or proposed wild or scenic rivers, trails or wilderness areas be impacted?		X				

Comment 11a

The seasonal trap net would be installed approximately 65 m upstream of the Camas Lake inlet in an off-trail area visually obscured by willows (Figure 2). Any impacts to aesthetics would be short term and minor.

Comment 11b

There would be minimal loss of angling opportunity as YCT currently comprise a small proportion of the total fish population in Camas Lake and upper Big Camas Creek. The proposed action is expected to benefit the WCT fishery through reduced competition. WCT densities will be maintained through natural reproduction as well as supplemental stocking. A tourism report is not necessary to quantify these impacts.

2.2.7 Cultural/Historic Resources

12. <u>CULTURAL/HISTORIC RESOURCES</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Destruction or alteration of any site, structure or object of prehistoric, or paleontological importance?		X				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				
d. Will the project affect historic or cultural resources?		X				

2.2.8 Summary of Evaluation of Significance

13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u> Will the proposed action result in:	IMPACT				Can Impact Be Mitigated*	Comment Index
	Unknown	None	Minor	Potentially Significant		
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources which create a significant effect when considered together or in total).		X				
b. Involve potential risks or adverse effects which are uncertain but extremely hazardous if they were to occur?		X				

c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?	X	X				13e
f. Is the project expected to have organized opposition or generate substantial public controversy?	X	X				13f
g. List any federal or state permits required.		X				

Comment 13e and f

Fish removal projects can generate controversy from some people. It is not known if this project would have organized opposition; however, similar projects have received support from members of the public and stakeholder groups. Prior to the 2014 Camas Lake rotenone treatment, concerns were raised by the Meagher County Board of Commissioners regarding project cost, recreational impacts, and environmental impacts of the project. Following a public meeting addressing these concerns, support for the project was garnered. The current proposed project would incur no additional costs other than staff time. Recreational and environmental impacts would be minimal, and the project would benefit the WCT fishery.

3 Alternatives

3.1 Alternatives Evaluated

3.1.1 Alternative 1 – Mechanical removal of nonnative Yellowstone cutthroat trout from 0.75 miles of Big Camas Creek.

This alternative would be beneficial to Big Camas Creek and Camas Lake WCT and would be a substantial contribution to the long-term conservation of the species in the Smith River Watershed. It has a high probability of success and negative effects to the fishery would be minimal considering the low density of YCT currently present in the system. This alternative would bring FWP closer to the goal of restoring WCT into 20% of their historical range within the Upper Missouri River.

3.1.2 Alternative 2 – No Action

The no action alternative would allow status quo management to continue which would allow the YCT population to compete and hybridize with WCT in Camas Lake and upper Big Camas Creek. With continued stocking of hatchery WCT it is conceivable that the long-term genetic goals of the project could still be achieved, although on a much longer time scale. Alternatively, there is potential that the long-term genetic goals are not met, and the resulting population becomes a hybrid swarm of varying levels of YCT and WCT genetic contribution. The selection of this alternative would not reduce threats to the species that encourage requests for listing WCT under the Endangered Species Act.

3.1.3 Alternative 3 – Removal of nonnative Yellowstone cutthroat trout from Big Camas Creek with rotenone.

This alternative would meet the project goals by removing all fish from the project area using the piscicide rotenone. However, verbal commitments were made to Meagher County residents in 2014 that additional rotenone treatments would not be pursued on this waterbody. Rotenone projects typically require multiple treatments (one per year) to achieve complete removal of the target organism (Finlayson et al. 2010). This alternative would cause a temporary loss of angling opportunity in Camas Lake and upper Big Camas Creek between the time of fish removal and repopulation (approximately 3 years). Because of the verbal commitments made during the initial project scoping and the potentially significant recreational impact of additional rotenone treatments in Camas Lake/Big Camas Creek this alternative was eliminated from further consideration.

4 Public Participation and Comments Instructions

The public will be notified in the following manners to comment on this current EA, the proposed action, and alternatives:

1. Public notices provided to all the daily and weekly newspapers in the region.
2. Public notice on the Fish, Wildlife & Parks webpage: <http://fwp.mt.gov>
3. Draft EA's will be available at the FWP Region 4 Headquarters in Great Falls.
4. A news release will be prepared and distributed to a standard list of media outlets interested in FWP Region 4 issues.
5. A news release posted on the FWP R4 Facebook page.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

A 30-day public comment period will extend from February 14th to March 16th, 2022. Interested parties should send comments to:

Montana Fish, Wildlife & Parks – Region 4
c/o Big Camas Creek Westslope Cutthroat Trout Conservation
4600 Giant Springs Road, Great Falls, MT 59405

Email: fwpr4publiccom@mt.gov

Prepared by: Alex Poole

Date: _____

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